



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,583	04/28/2006	Hermann Bieg	72261.45	3058
6/04/74 7590 12/03/2008 GRAY ROBINSON, P.A. P.O. Box 2328 FT. LAUDERDALE, FL 33303-9998				
EXAMINER				
GREECE, JAMES R				
ART UNIT		PAPER NUMBER		
2873				
MAIL DATE		DELIVERY MODE		
12/03/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/595,583

Applicant(s)

BIEG ET AL.

Examiner

JAMES R. GREECE

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-32, 34, 36, 40-43, 49 and 50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-32, 34, 36, 40-43, 49 and 50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/7/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election of Species M (claims 26-32, 34, 36, 40-43, 49-50) in the reply filed on 8/6/2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 33, 35, 37-39, 44-48, 51-52 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Drawings

There are no objections to the applicant's drawings at this time.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 26-31, 34, 36, 40-41 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Schuster et al (USPAT 6,445,510).

Re claim 26, Schuster et al teach for example in fig. 1, Optical imaging device, in particular an objective for microlithography in the field of EUVL for producing semiconductor elements,

having a beam path, (See at least figure 1) a plurality of optical elements (see at least col. 6, lines 40-50) and a diaphragm device with an adjustable diaphragm opening shape, (see at least numerals 1,2, and 6) wherein the diaphragm device has a diaphragm store with a plurality of different diaphragm openings with fixed shapes in each case, which can be introduced into the beam path (for details see at least col. 3 lines 3-11).

Re claim 27, Schuster et al teach for example in fig. 1, wherein said diaphragm store is designed as a revolving disc diaphragm stack with a plurality of individual revolving disc diaphragms which are provided with diaphragm openings (for details see at least col. 3 lines 3-11).

Re claim 28, Schuster et al teach for example in fig. 1, wherein said revolving disc diaphragm stack is arranged outside said optical imaging device (for details see at least col. 3 lines 3-11).

Re claim 29, Schuster et al teach for example in fig. 1, wherein said revolving disc diaphragms are accommodated inside said revolving disc diaphragm stack in separate plug-in units (See at least figure 1).

Re claim 30, Schuster et al teach for example in fig. 1, wherein said revolving disc diaphragm stack is designed displaceably in such a way that said revolving disc diaphragm to be introduced into the beam path can be selected by displacing said revolving disc diaphragm stack (for details see at least col. 6, lines 63-67 through col. 7, lines 1-5).

Re claim 31, Schuster et al teach for example in fig. 1, wherein said diaphragm device has a feeder device which removes said revolving disc diaphragm to be introduced into the beam path from said revolving disc diaphragm stack in particular also from the corresponding separate plug-in unit, introduces it into the beam path, and deposits it again in said revolving disc diaphragm stack after it has been used (for details see at least col. 4, lines 1-26).

Re claim 34, Schuster et al teach for example in fig. 1, wherein said diaphragm device has a holding device for fixing said revolving disc diaphragm in the beam path (for details see at least col. 4, lines 1-25).

Re claim 36, Schuster et al teach for example in fig. 1, wherein said lifting device has a holding device for fixing said revolving disc diaphragm in the beam path (for details see at least col. 4, lines 1-25).

Re claim 40, Schuster et al teach for example in fig. 1, comprising an opening through which said revolving disc diaphragm can be introduced (for details see at least col. 4, lines 1-25).

Re claim 41, Schuster et al teach for example in fig. 1, wherein said diaphragm device is dynamically decoupled (for details see at least col. 4, lines 1-25).

Re claim 49, Schuster et al teach for example in fig. 1, wherein it is used as a projection objective, in particular in a projection exposure machine for microlithography for producing semiconductor components (for details see at least col. 1, lines 28-36)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 32 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al (USPAT 6,445,510).

Re claim 32, Schuster et al do not explicitly disclose wherein said feeder device is designed as a moveable robot gripper arm.

Re claim 32, Schuster et al do not explicitly disclose wherein said lifting device picks up said revolving disc diaphragm from said robot gripper arm.

However the examiner takes official notice to the fact that this process is a well known mechanical process for moving objects (example records in a jukebox) and would have been an obvious option out of a limited number of options available to move the diaphragm to one having ordinary skill in the art at the time the invention was made. Therefore it would have been obvious to try this gripper arm process for the predictable result of precise movement of objects without human contamination.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 43 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "rocker" is not explicitly disclosed and leaves the claim open to multiple and conflicting interpretations. Therefore correction is required in order to correctly examine the claim.

8. Claim 50 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant does not fully disclose the acronym EUVL in the claim and further since there is more than one possible interpretation the examiner requires correction for further examination.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES R. GREECE whose telephone number is (571)272-3711. The examiner can normally be reached on M-Th 7:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. R. G./
James R Greece
Examiner, Art Unit 2873
11/24/2008

/Ricky L. Mack/
Supervisory Patent Examiner, Art Unit 2873